STATE OF VERMONT

PUBLIC SERVICE BOARD

Investigation into: (1) whether Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively, "Entergy VY"), should be required to cease operations at the Vermont Yankee Nuclear Power Station, or take other ameliorative actions, pending completion of repairs to stop releases of radionuclides, radioactive materials, and, potentially, other non-radioactive materials into the environment; (2) whether good cause exists to modify or revoke the 30 V.S.A. § 231 Certificate of Public Good issued to Entergy VY; and (3) whether any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board orders related to the releases	)	Docket No. 7600

CONSERVATION LAW FOUNDATION'S BRIEF REGARDING PUBLIC SERVICE BOARD JURISDICTION

INTRODUCTION

This proceeding addresses the appropriate regulatory response to the leaks at Vermont Yankee and the damage they have caused and continue to cause. In response to requests from Conservation Law Foundation and New England Coalition, the Vermont Public Service Board (Board) opened this investigation to determine if: (1) Entergy Nuclear Vermont Yankee, LLC, and Entergy Nuclear Operations, Inc. (collectively, "Entergy VY"), should be required to cease operations at the Vermont Yankee Nuclear Power Station, or take other ameliorative actions, pending completion of repairs to stop releases of radionuclides, radioactive materials, and, potentially, other non-radioactive materials into the environment; (2) good cause exists to modify

or revoke the 30 V.S.A. § 231 Certificate of Public Good issued to Entergy VY; and (3) any penalties should be imposed on Entergy VY for any identified violations of Vermont statutes or Board orders related to the releases. *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, Order of 2/25/2010 at 9.

Entergy VY claims virtually all action by the Board in this proceeding is preempted and that only the Federal government may take regulatory action in response to the leaks. (Entergy VY initial brief 5/18/10 at 22). In this proceeding, the Board has already concluded in its order opening this investigation that the leaks could increase decommissioning costs and affect future land use of the site. *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, Order of 2/25/2010 at 8. The Board further concluded that it is "not preempted from taking action in response to the leaks at Vermont Yankee, to the extent that the leaks may have economic and other non-radiological-health-and-safety consequences and to the extent that [its] action neither conflicts directly with the NRC's exercise of federal jurisdiction nor frustrates the purposes of the federal regulation." *Id*. at 7.

The Board directed Entergy VY to provide information on actions it has taken regarding leaks, allowed other parties an opportunity for discovery and to respond to Entergy VY's filings, and required additional legal briefing on the issue of the Board's authority. *Id*. at 8.

SUMMARY OF ARGUMENT

The Board has authority to issue utilities and entities operating generation facilities in the state certificates of public good (CPGs), essentially allowing them a license to operate under the conditions set forth in the CPG. 30 V.S.A. §§ 203, 209, 231. This authority includes the authority to enforce the terms of any CPG the Board issues. *See Joint Petition of Adelphia*

Communications and Time Warner, Docket 7077, Order of 12/29/2005 at 31 (emphasizing the Board's intent to enforce a party's CPG obligations). The Board's authority includes the power to restrain the holder of a CPG from violations of law and to revoke a CPG if it no longer promotes the general good of the state. 30 V.S.A. §§ 209, 231.

While both federal and state regulatory agencies have oversight over nuclear power facilities, it is well-settled that state regulators maintain their traditional authority to regulate non-radioactive health and safety issues, including land-use and economic concerns associated with nuclear power generation. *Pacific Gas & Electric Co. v. State Energy Res. Conservation & Dev. Comm'n*, 461 U.S. 190, 205, 212 (1983)(herein referenced and cited at "*PG&E*"). Board regulatory action against Vermont Yankee is not preempted when motivated by non-preempted concerns and when it neither conflicts with nor frustrates the Congressional purpose of the Atomic Energy Act (AEA). *Id*. at 220-223. Here, the Board already has acknowledged that the leaks trigger land-use and economic-related concerns, which are not preempted by federal law:

> [i]t appears indisputable that the leaks may result in increased site contamination that could substantially increase decommissioning costs. Increased site contamination could also delay completion of the decommissioning process, which in turn could affect the future economic use of the site. These concerns do not fall within the preempted sphere of radiological health.

Investigation into Entergy Nuclear Vermont Yankee, Docket 7600, Order of 2/25/2010 at 8. Board action here imposes no new regulatory limitations on Vermont Yankee and does not frustrate objectives of Congress, which contemplated a regulatory role for states and conditioned the promotion of nuclear development on the protection of public health and safety. *See PG&E*, 461 U.S. at 222; *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 257 (1984); 42 U.S.C. § 2013(d)). Congress did not show any intent to usurp state's traditional authority to regulate

utilities based on concerns outside of radiological health and safety. *See* S. Rep. No. 86-870, at 11 (1959).

Plainly, Entergy VY has violated Vermont law by discharging unpermitted pollutants into the groundwater and surface waters of the state. 10 V.S.A. § 1259, 1263; (Affidavit of Jeffery Hardy 2/3/10 Exhibit EN-JH-1 at 2-4; Lochbaum 6/30/10 at 24; French 6/30/10 at 22; Exhibit EN-MS-4; Mason 7/2/10 at 3; ANR-DM-2; Thompson 7/2/10 at 2; ANR-CT-2; Akielaszek 7/2/10 at 2-3; ANR-JA-2; Greenwood 7/1/10 at 6-7). The discharges pose significant land-use and economic concerns for Vermont. (Lochbaum 6/30/10 at 27-28; French 6/30/10 at 19; Shadis 7/2/10 at 9-13; *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, Order of 2/25/2010 at 8). This Board has authority to restrain a CPG holder from violations of law and to amend or revoke a CPG when it no longer promotes the general good of the state. 30 V.S.A. §§ 209(a), 231(a). Until Vermont Yankee undertakes reasonable preventative measures to avoid likely ongoing and future leaks and remediates the contamination that has occurred from past leaks, it should not be allowed to operate in a manner that jeopardizes the general good of the state. The Board has the authority, indeed the duty, to revoke Entergy VY's CPG where the operation of Vermont Yankee fails to promote the public good of the state. *See Investigation into Duxbury Water*, Docket 5817, Order of 9/4/96 at 4-5.

FACTUAL BACKGROUND

I. Leaks

In January 2010 the existence of one or more leaks of radioactive material and radionuclides at the Vermont Yankee Nuclear Power facility in Vernon, Vermont became

known.[1] (A.CLF:EN.1-2; EN-JH-1 at 2, para. 7; Trask 3/31/10 at 2). Entergy VY admits "that during the period from November 2009 until February 15, 2010, a fluid stream containing radionuclides, was released from a pipe tunnel on the west side of the [Advanced Off-Gas] AOG building at the [Vermont Yankee Nuclear Power Station] VY Station." (A.CLF:EN.1-8). Entergy VY also admits "that during the time period from January 2010 until February 15, 2010, a fluid stream containing cobalt-60 and zinc-65 was released from the pipe tunnel on the west side of the AOG building at the VY station." (A.CLF:EN.1-3c). Entergy VY further admits "that the VY Station has detected tritium, [a radionuclide,] in groundwater, (A.CLF:EN.1-4; A.CLF:EN.1-2), at levels "in excess of 20,0000 picocuries per liter." (A.CLF:EN.1-5; Attachment A.CLF:EN.1-4a), and that this "tritium-affected groundwater has reached or will in the future reach the Connecticut River." (A.CLF:EN.1-7; Shaw 3/31/10 at 9 ("It is likely that some level of tritium-affected groundwater has reached the Connecticut River.")). Entergy VY measured levels of tritium as high as 2,400,000 pCi/L in groundwater. (CLF-SF-6 at 84). Stratton French's testimony also concludes that tritiated groundwater is being discharged into the Connecticut River along a stretch of shoreline that is greater than 300 feet in length. (French 6/30/10 at 22; Exhibit EN-MS-4). Soil below the VY Station, groundwater beneath the VY Station and the Connecticut River all contain radionuclides or other radioactive materials as a result of the leakage. (A.CLF:EN.1-14a,b,c; A.CLF:EN.1-2).

II. Contamination Is Extensive.

The contamination from the leaks is not limited to the areas identified by Entergy VY. Entergy VY has not accurately determined the extent of soil contamination or the appropriate

[1] CLF-SF-6 at 76-77, 84-85. The Supplemental Report to the comprehensive Reliability Assessment of the Vermont Yankee Nuclear Facility (CLF-SF-6) repeatedly refers to multiple leaks.

remediation needed. (French 6/30/10 at 10). Radioisotopes have likely migrated beyond the release points along groundwater pathways, as indicated by Entergy VY's own sampling data. (French 6/30/10 at 15-16). Additionally, Entergy VY's plans for remediation of the groundwater contamination are inadequate and "are not likely to remediate much of the contamination at the site." (French 6/30/10 at 16). Neither the location nor the volume of extraction activities is sufficient to remediate the groundwater contamination or capture the bulk of the tritium that has entered the ground. (French 6/30/10 at 17-19).

Bedrock groundwater likely is or will soon be contaminated by tritium. (French 6/30/10 at 20). Entergy VY's sampling data show that "radionuclides released from VY, tritium and other radioisotopes, have reached the bedrock surface, and threaten the water supply aquifer beneath it." (French 6/30/10 at 20). The less transmissive silt layers that Mr. Shaw claims protect the bedrock aquifer are discontinuous and do not provide an effective barrier to contamination reaching the bedrock aquifer. (*Id.*). Entergy VY's "remedial effort is largely ineffective at protecting the bedrock aquifer. .... Tritium and other radionuclides have been detected at the bedrock surface for months. It may simply be a lack of monitoring capacity within the bedrock beneath the site that explains why it has not yet been confirmed within this aquifer." (French 6/30/10 at 21).

Entergy VY's inadequate monitoring and evaluation show that the contamination is more severe than claimed by Entergy VY. Entergy VY admits that it "has detected tritium in groundwater-monitoring wells located outside of the preliminary plume shown on Exhibit EN-MS-4." (A.CLF:EN.1-11). Entergy VY cannot responsibly claim that it has either identified the extent of soil or groundwater contamination, and as a result, it cannot claim that the remediation proposed is adequate. As early as 2007, Entergy VY identified a number of "potential release

areas" including underground pipes that have been "in place many years" and about which there is neither a "clear understanding of the[ir] condition" nor any "real means to predict their integrity over time." (French 6/30/10 at 5, quoting A.CLF; EN.2-1.2, Exhibit CLF-SF-4). The monitoring that was put in place in 2007 was limited to only three wells "far apart and away from the plant operations." (French 6/30/10 at 6). The wells are so far apart that "the tritium plume as currently defined almost bypassed them altogether." (Id). At the time of the leaks, Entergy VY's monitoring was so inadequate that it did not reveal the source of the leaks. The NRC Inspection Report reveals that the source was only identified after a new well was installed at the site of a "soil depression" near the AOG building. (French 6/30/10 at 7; Exhibit CLF-SF-7). It was the "ground subsistence due to rapid subsurface fluid flow at the release point that ultimately guided investigators to the source, not an existing monitoring well network from which detailed groundwater flow direction and radiochemistry data could be collected." (French 6/30/10 at 7-8).

The contamination has likely been ongoing for months, further demonstrating the impacts are more severe than represented by Entergy VY. The supplemental Report to the Comprehensive Reliability Assessment of the Vermont Yankee Nuclear Facility (Supplemental CRA) identified "sink holes" that "have occurred since July 2008," and were "ultimately determined to be the source of the leakage." (Exhibit CLF-SF-6 at 78).

Despite some leaks being repaired, the contamination of the soil, groundwater and surface water remains. Contamination was ongoing for at least two years. Sink holes identified two years previously at the location of the leak indicate that the leak was ongoing since that time. (French 6/30/10 at 7-8, 17; CLF-SF-6 at 78).

III. Violations of Law

Entergy VY has not complied with applicable federal requirements that allow the release of radioactively contaminated water from Vermont Yankee only though controlled, monitored pathways and only at a radioactivity level within specified federal limits. (Lochbaum 6/30/10 at 16). Entergy VY admits that "ALARA ("as low as reasonably achievable") dose controls apply both to routine releases and non-routine releases, such as leaks and spills. Regardless of the nature or source, Entergy VY must account for the release and evaluate the release relative to NRC and various other agencies' requirements. To the extent that releases fall within regulatory limits, they are not unlawful." (A.CLF:EN.1-23). Releases that are not within regulatory limits are unlawful. *Id.*

The leaks at Vermont Yankee allowed radioactively contaminated water into the ground. Entergy VY did not monitor these releases. Entergy VY did not control these releases. The total amount of radiation released is not known. (Lochbaum 6/30/10 at 25). Entergy VY could be subject to a civil penalty of at least $12,600,000 for the continued operation of the facility after November 2009 in the face of "evidence of an ongoing uncontrolled, unmonitored release of radioactively contaminated water in violation of federal requirements and the plant's operating license." (Lochbaum 6/30/10 at 18).

The leaks at Vermont Yankee also violate state law. Entergy VY's discharge permits do not authorize the releases from the leaks. (Mason 7/2/10 at 3; ANR-DM-2; Thompson 7/2/10 at 2; ANR-CT-2; Akielaszek 7/2/10 at 2-3; ANR-JA-2; Lochbaum 6/30/10 at 21).

Undetected leaks may be ongoing. Entergy VY's "Tritium Team" identified "plant systems that could be the source of the leak." (Lochbaum 6/30/10 at 25). While they definitively identified the augmented offgas system drain as being a leak source, "there is no

publicly available information demonstrating clearly that ENVY or its contractors have eliminated the[] other candidates as sources of other leakage. The NRC inspection report merely recites what ENVY did but does not conclude that there are no other leaks." (Lochbaum 6/30/10 at 25-26; Exhibit CLF DAL-12). These other potential sources are locations that are "neither controlled nor monitored," and represent "a list of candidate sources for future leakage." (Lochbaum 6/30/10 at 26). They certainly indicate that leaks may be ongoing. "There are likely other unidentified sources for ongoing and/or future releases." (Lochbaum 6/30/10 at 27).

IV. Harm from Leaks.

The leaks cause environmental, economic, reliability and land use impacts. Mr. French's testimony explains in detail how Entergy VY's poor performance, including poor monitoring and failure to follow its own recommended action plan, (French 6/30/10 at 5-7), failure to put in place monitoring that would lead to the detection of leaks (French 6/30/10 at 7-8), failure to be aware of potential leaks where they were found (French 6/30/10 at 8), failure to adequately evaluate the remediation necessary (French 6/30/10 at 9), failure to provide for responsible remediation of the property (French 6/30/10 at 9-11), failure to responsibly evaluate and address contamination at soil depths (French 6/30/10 at 12-14) and failure to provide remediation that will capture most of the contamination (French 6/30/10 at 17-19). The effect of all this is that there remains contamination at the site and in the groundwater and surface water and that this contamination "will continue to threaten and harm the environment, and future use of the land and water resources." (French 6/30/10 at 19).

Ms. Greenwood's testimony shows that the contamination of the groundwater, which is a public trust resource, harms the rights of others to use the resource. (Greenwood 7/1/10 at 7-8).

Regardless of the radioactive or non-radioactive nature of the discharge to groundwater, the protections of groundwater are the same. (Greenwood 7/1/10 at 9).

Mr. Lochbaum's testimony identifies economic harm from the leaks. He notes that NRC could impose sanctions of $12,600,000 and that "the contaminated water leaking into the environment puts the economy at risk." (Lochbaum 6/30/10 at 28). Economic harm also results from any unexpected forced outage as a result of recurring leaks that reveal management weaknesses. (Lochbaum 6/30/10 at 29).

Mr. Shadis's testimony shows that "decommissioning costs and the costs of restoring the site to 'greenfield' state … are almost certain to substantially increase …" over his previous estimates. (Shadis 7/2/10 at 9). These increased costs "raise[] the specter of a default or diversion of funds from those allocated for the site to be restored to Greenefield status, or both." (Shadis 7/2/10 at 12). Contamination is also likely to harm drinking water. (Shadis 7/2/10 at 13-15).

When asked to admit "that the existence of tritium and radioactive material in the soil and groundwater at the site will increase the cost to decommission and clean up the facility site following closure of the plant," Entergy VY responded that it "cannot admit or deny the request for admission at this time." (Q&A.CLF:EN.1-18). Entergy states it "has begun" an initiative to extract groundwater and also "intends" to excavate and remove some soil from the property. (A.CLF:EN.1-18). Entergy VY claimed it has no documents "showing any analysis undertaken or information gathered that identifies or in any way evaluates the decommissioning and/or clean-up costs at the VY facility that specifically take into account the existence of tritium, radionuclides and radioactive material added to the ground and/or groundwater since January 2010." (A.CLF:EN.1-18(b)). Entergy VY has neither committed to clean up, nor has it even

evaluated the impact on decommissioning. Together with the testimony from Mr. French that Entergy VY's evaluation and remediation is inadequate, the Board can only conclude that continued environmental harm will occur and decommissioning costs will increase and likely place an economic burden on Vermont.

The reliability of operations also is affected. The "leaks are an indicator of an increased likelihood that other pipes subject to similar stresses and environments may be in similar poor condition." (Shadis 7/2/10 at 5). This would affect the reliability of the plant. (*Id.;* Lochbaum 6/30/10 at 28-29).

The leaks also harm future land use. The extent of damage has not been responsibly evaluated, is not known, and is likely understated. (French 6/30/10 at 10-24). Entergy VY has failed to take reasonable steps to identify and remediate the contamination. *Id.* As a result, an unknown amount of contamination remains and continues to spread through the property, water and surroundings. This affects future uses of the property. Entergy VY cannot rest on its claims that its obligations under the 6545 MOU to restore the site preclude impacts to future land uses. (A.CLF:EN.1-31.a). Entergy VY has done no more than "begun" a clean-up effort and stated it "intends" to undertake some remediation. (A.CLF:EN.1-18). Future land use impacts should be evaluated based on actions that actually have been taken, not future "intentions." The existence of continued contamination at the site and the inadequate response by Entergy VY requires the Board to find that future land uses will be harmed by the leaks.

ARGUMENT

I. BOARD ACTION IS NOT PREEMPTED BY FEDERAL LAW.

The Board has broad authority to take action to shut down or restrain Vermont Yankee based on non-radiological health and safety concerns associated with the facility's ongoing discharges, continued contamination, and inadequate evaluation and response to the leaks. *See* 30 V.S.A. §§ 203, 209, 231; *see also PG&E*, 461 U.S. at 222-223. A State's traditionally-reserved authority to regulate utilities based on land-use or economic concerns remains untouched by federal preemption. *PG&E*, 461 U.S. at 205, 212. Board action to shut down or restrain Vermont Yankee neither conflicts with nor frustrates Congress's objective in enacting the AEA. *See PG&E*, 461 U.S. at 222; *Silkwood*, 464 U.S. at 257. Pursuant to Vermont law, this Board has repeatedly recognized its authority to act in the field of nuclear power generation when it is motivated by concerns other than radiological health and safety. *See, e.g., Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 64-65; *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, Order of 2/25/10 at 7; *Investigation into General Order No. 45*, Docket 6545, Order of 7/11/02 at 15.

1. *The Board Has Authority to Issue and Enforce Certificates of Public Good.*

Vermont law grants the Board licensing authority over utilities in the state. 30 V.S.A. §§ 203, 231. These provisions empower the Board to issue certificates of public good (CPGs) to businesses wishing to engage in the manufacture and distribution of electricity "[i]f the board finds that the operation of such business will promote the general good of the state." *Id*. Without a CPG, a nuclear generating facility is not authorized to operate in the State of Vermont. 30

V.S.A. §§ 231, 248(e). The U.S. Supreme Court has upheld states' licensing authority in the nuclear power plant context noting: "States may refuse to issue certificates of public convenience and necessity for individual nuclear power plants." *PG&E*, 461 U.S. at 228. Every state has a regulatory body charged with overseeing the adequacy, reliability, and ratemaking of electric utilities. Sager A. Williams, Jr., *Limiting Local Zoning Regulation of Electric Utilities: A Balanced Approach in the Public Interest*, 23 U. Balt. L. Rev. 565, 602 (1994). Vermont law vests that responsibility is vested in the Public Service Board. 30 V.S.A. § 203(1).

The Board maintains broad authority to impose conditions and enforce the CPGs it issues. The Board has repeatedly asserted its authority to condition approval of a CPG upon the adoption of certain terms. When the Board granted Entergy VY its current CPG, it stated: "The issuance of certificates subject to necessary conditions has been a routine practice of this Board and of all administrative agencies in Vermont in literally thousands of instances for almost a century." *Investigation into General Order No. 45* Docket 6545, Order of 7/11/2002 at 12 n.38 (citing Docket 5330, Order of 1/7/91 at 8). Part of the authority to issue CPGs with conditions is the authority to ensure that a utility complies with the law and with the terms of its CPG. *Investigation into General Order No. 45*, Docket 6545, Order of 7/11/02 at 15; *See also Joint Petition of Adelphia Communications and Time Warner*, Docket 7077, Order of 12/29/2005 at 31 (emphasizing the Board's intent to enforce a party's CPG obligations). Title 30 V.S.A. § 203 grants the Board continuing jurisdiction over "[a] company engaged in the manufacture, … or sale of…electricity directly to the public or to be used ultimately by the public…." 30 V.S.A. § 203(1). This jurisdiction expressly includes the authority "render judgment and make orders," 30 V.S.A. § 209(a), "[t]o restrain any company subject to supervision under this chapter from

violations of law," 30 V.S.A. § 209(a)(6), and "amend or revoke" certificates of public good, 30 V.S.A. § 231(a).

In prior cases, the Board has determined that it has "statutory obligations to oversee the operation of the state's regulated utilities – including ensuring that the utilities are providing adequate service and not violating applicable law – and, when warranted, to revoke a utility's franchise." *Investigation into Duxbury Water*, Docket 5817, Order of 9/4/96 at 4. In the *Investigation into Duxbury Water* proceeding, the Board revoked a utility's CPG due to "profound deficiencies" in operation. Docket 5817, Order of 9/4/96 at 23-24. The Board observed that "[i]f a proposed utility can merit a CPG only when the Board determines that the utility will promote the general good of the state, it follows that in deciding whether to revoke the CPG the Board should consider whether the utility continues to promote the general good." *Id*. at 4-5. In that case, the Board considered not only the utility's compliance with applicable law, but also the following other criteria:

1. Technical expertise
2. Adequate service
3. Facility maintenance
4. Balance between Customers and Shareholders
5. Financial Stability
6. Company's ability to obtain financing
7. Business reputation
8. Relationship with customers

Id. (citing *In re Petition of Quechee Service Company*, Docket 5699, Order of 11/15/94).

In the field of nuclear power generation, the U.S. Supreme Court has upheld the prerogative of "the states [to] exercise their traditional authority over the need for additional generating capacity, the type of generating facilities to be licensed, land use, rate-making, and the like." *PG&E*, 461 U.S. at 212.

2. *Federal Preemption in the Field of Nuclear Power Generation Is Limited to Radiological Health and Safety – Issues NOT Involved in this Proceeding.*

The federal preemption doctrine derives from the Supremacy Clause of the United States Constitution, which obligates states to adhere to federal law as the "the supreme Law of the Land … any Thing in the Constitution or Laws of any State to the Contrary notwithstanding." U.S. Const. art. VI, § 2. Under federal preemption jurisprudence, courts "start with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless that was the clear and manifest purpose of Congress." *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947); *see also N.Y. State Dept. of Social Services v. Dublino*, 413 U.S. 405, 413 (1973). This creates a "presumption against preemption" which is only "heightened where federal law is said to bar state action in fields of traditional state regulation." *Riegel v. Medtronic, Inc.*, 552 U.S. 312, 334 (2008) (citing *N.Y. State Conference of Blue Cross & Blue Shield Plans v. Travelers Ins. Co.*, 514 U.S. 645, 655 (1995)) (internal quotation marks omitted).

In the field of nuclear power generation, states maintain their traditional regulatory authority over non-radiological health and safety concerns. In *PG&E*, the Supreme Court confronted the issue of whether a California state law provision prohibiting the construction of nuclear power plants prior to a state determination of adequate means for the disposal of nuclear waste was preempted by the Atomic Energy Act (AEA). *PG&E*, 461 U.S. at 198. The Court held that the AEA did not preempt the state law provision. *Id*. at 216. The Court determined that

Congress "intended that the federal government should regulate the radiological safety aspects involved in the construction and operation of a nuclear plant, but that the *States retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, cost and other related state concerns*." *Id*. at 205 (emphasis added). The Court explicitly acknowledged that nuclear waste disposal is a legitimate economic concern for the purposes of state regulation: "Without a permanent means of disposal, the nuclear waste problem could become critical leading to unpredictably high costs to contain the problem or, worse, shutdowns in reactors." *Id*. at 213-14. The Court accepted the state's avowed economic purpose for enacting the provision without "attempting to ascertain California's true motive" in part because "it would be particularly pointless … to engage in such inquiry here when it is clear that states have been allowed to retain authority over the need for electrical generating facilities easily sufficient to permit a state so inclined to halt the construction of new nuclear plants by refusing on economic grounds to issue certificates of public convenience in individual proceedings." *Id*. at 216. The Court affirmed that the AEA's objective to promote nuclear power is "not to be accomplished at all cost" and upheld "the continued preservation of state regulation in traditional areas." *Id*. at 222 (internal quotation marks omitted). The shared regulation of nuclear power generation between federal and state entities outlined in *PG&E* has been re-affirmed many times over by the Court and by this Board. *See, e.g., Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 63-64; *Silkwood*, 464 U.S. at 249, 256.

In every case since *PG&E* where the U.S. Supreme Court has considered federal preemption under the AEA, the Court has held that the AEA does not present a bar to state law claims. *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 257 (1984); *Goodyear Atomic Corp. v. Miller*, 486 U.S. 174 (1988); *English v. Gen. Elec. Co.*, 496 U.S. 72 (1990). In 1984 in *Silkwood*

v. Kerr-McGee Corp., the Court held that the plaintiff in a state law tort action for injuries resulting from a radioactive contamination incident was not preempted by the AEA from collecting punitive damages from the owner corporation of a nuclear facility. 464 U.S. at 258. The Court concluded that "Congress did not believe that it was inconsistent to vest the NRC with exclusive regulatory authority over the safety aspects of nuclear development while at the same time allowing plaintiff's like Silkwood to recover for injuries caused by nuclear hazards." *Id*. In 1988 in *Goodyear Atomic Corp. v. Miller*, the U.S. Supreme Court held that "the additional award provision of Ohio's workers' compensation law … does not run afoul of the Supremacy Clause." 486 U.S. at 186. The Court reasoned that "[e]ven if the additional-award provision is sufficiently akin to direct state regulation to be potentially barred by the Supremacy Clause, 40 U.S.C. § 290 – which empowers States to apply 'workmen's compensation laws' to federal premises to the same extent as such laws are applied to private facilities – unambiguously provides the requisite clear congressional authorization for the application of the provision." *Id*. at 175. In 1990 in *English v. General Electric Co.*, the U.S. Supreme Court held that the AEA did not preempt a plaintiff's state law intentional infliction of emotional distress claim against her former employer stemming from her transfer and discharge after she reported but failed to clean up radioactive contamination. 496 U.S. at 90. The Court reasoned, *inter alia*, that the state law cause of action was "not motivated by safety concerns …." *Id*. at 84.

Federal legislative history confirms that Congress intended preemption to be limited under the AEA and that Board action in this case is not precluded. A 1959 amendment to the AEA allowing states to enter into agreements with the Atomic Energy Commission (AEC), the predecessor agency to the NRC, clearly demonstrates intent to preserve states' traditional regulatory role in the field of nuclear power generation. 42 U.S.C. § 2021(k) reads, "Nothing in

this section shall be construed to affect the authority of any State or local agency to regulate activities for purposes other than protection against radiation hazards." Comments from the Congressional Committee explain: "This subsection is intended to make it clear that the bill *does not impair the state authority to regulate activities of AEC licensees for the manifold health, safety, and economic purposes other than radiation protection*." S. Rep. No. 86-870, at 11 (1959) (emphasis added). The significance of the Committee's commentary is underscored by the U.S. Supreme Court's often-recited declaration that "the purpose of Congress is the ultimate touchstone in every preemption case." *Wyeth v. Levine*, 129 S. Ct. 1187, 1195 (2009)(quoting *Medtronic, Inc. v. Lohr*, 518 U.S. 470, 485 (1996).

3. *Entergy Has Violated the Law.*

Vermont law protects both groundwater and surface water from discharges of waste. 10 V.S.A. § 1259 (discharges of any waste without a permit). 10 V.S.A. § 1263 (discharge permit requirements). Under 10 V.S.A. § 1410(a)(4), "all persons have a right to the beneficial use and enjoyment of groundwater free from unreasonable interference by other persons…." Vermont law provides "for equitable relief … for the unreasonable harm caused by another person … altering the character or quality of groundwater." 10 V.S.A § 1410(c).

Vermont Yankee's existing CPG requires Entergy VY to "comply fully with Vermont law to the extent that its requirements are not inconsistent with specific requirements imposed by FERC, NRC, the Securities and Exchange Commission and any other federal agencies exercising authority over Entergy Nuclear Vermont Yankee, LLC and Entergy Nuclear Operations, Inc." *Investigation into General Order No. 45*, Docket 6545, Certificate of Public Good Issued 6/13/2002 at 2. The terms of Entergy VY's CPG themselves carry the force of law. *Investigation*

into General Order No. 45, Docket 6545, Order of 7/11/02 at 15 ("[F]or Entergy to operate lawfully it must comply with all of the terms of its CPG ….").

The testimony in this case confirms numerous violations of law resulting in Entergy VY violating its CPG. Entergy VY acknowledges that contamination from the leaks is in groundwater beneath the facility and has reached the Connecticut River. (Shaw 3/31/10 at 9; French 6/30/10 at 22; Exhibit EN-MS-4; Spiese 7/2/10 at 4). ANR has testified that Entergy VY has no authorization to discharge waste from the leaks into the groundwater or the Connecticut River. (Mason 7/2/10 at 3; Thompson 7/2/10 at 2; Akielaszek 7/2/10 at 2-3). Entergy VY admits that contamination levels in monitoring wells has exceeded, and continues to exceed, EPA drinking water standards. (A.CLF:EN.1-5). The testimony of David Lochbaum, a nuclear engineer and former nuclear regulator currently working for the Union of Concerned Scientists confirms that there are continuing uncontrolled and unmonitored releases of radioactive material into the environment in violation of federal standards. (Lochbaum 6/30/10 at 18). The testimony of Stratton French, an independent hydrogeologist confirms that based on Entergy VY's own data, contamination is likely reaching bedrock aquifers and the inadequate monitoring, evaluation and response to the leaks has resulted in contamination to groundwater and surface water. (French 6/30/10 at 19-24). The testimony of Ray Shadis confirms that the leaks and the inadequate response increases decommissioning costs and affects reliability and future land use of the site. (Shadis 7/2/10 at 4-15). Overall, Entergy VY's actions and the recurring discharges alter the character and quality of the groundwater, and are contaminating surface water in violation of Vermont law. Limited federal preemption does not preclude the Board from rightfully exercising its authority to enforce the terms of the CPG it issued and restraining Entergy VY from violating the law. 30 V.S.A. § 209(a)(6).

4. *The Leaks have Violated the Public Trust*

The State of Vermont has an inviolable public trust obligation to preserve the public uses and to protect the environmental integrity of waters of the Connecticut River and the groundwater resources of the state. Until Entergy VY takes reasonable measures to fix and remediate leaks into the Connecticut River and into the state's groundwater, and reasonable measures to avoid future leaks, this Board has a public trust obligation to revoke Entergy VY's CPG.

Rooted in ancient Roman law and common law, the public trust doctrine confers states with the "authority as sovereign to exercise a continuous supervision and control over the navigable waters of the state and the lands underlying those waters." *State v. Cent. Vt. Ry., Inc.*, 153 Vt. 337, 345 (1990) (quoting *Nat'l Audubon Soc'y v. Super. Ct*., 658 P.2d 709, 712 (Cal. 1983)). States acquired this authority as an absolute right on behalf of their citizens upon entry into the Union. *Barney v. City of Keokuk*, 94 U.S. 324, 333 (1876). The state holds its public trust authority "in perpetuity" and has an "ineluctable duty to exercise this power." *State v. Cent. Vt. Ry., Inc.*, 153 Vt. At 345 (citing *Nat'l Audubon Soc'y v. Super. Ct*., 658 P.2d 709, 712 (Cal. 1983)). State public trust uses of surface water include commerce, navigation, environmental preservation, research, fishing, swimming, and shore activities. *In re: Dean Leary* (*Point Bay Marina, Inc.*), Docket No. MLP-96-04, Findings of Fact, Conclusions of Law and Order (Aug. 1, 1997); *see also Ill. Cent. R.R. Co. v. Ill.*, 146 U.S. 387, 452 (1892). The State has a "duty, independent of the public good determination, to assure the protection of public trust uses." *In re: Dean Leary* (*Point Bay Marina, Inc.*), VT WRB Docket No. MLP-96-04, Findings of Fact, Conclusions of Law and Order of 8/1/97 (citing *In re: Dean Leary*, VT WRB Docket No. MLP-

94-08, Memorandum of Decision at 4 (April 13, 1995)). The State's public trust responsibility is reflected in the Vermont constitution, which provides that "[t]he inhabitants of this State shall have liberty in seasonable times … to fish in all boatable and other waters (not private property) under proper regulations…." Vt. Const. ch. 2, § 67. Vermont has extended its public trust obligations to include state groundwater resources as well. 10 V.S.A § 1390(5) ("[I]t is the policy of the state that the groundwater resources of the state are held in trust for the public.").

Vermont's public trust responsibility extends to Connecticut River waters. Vermont has accepted jurisdiction under the Clean Water Act over Entergy VY's discharges into the Connecticut River. Mason 7/2/10 at 2; ANR-DM-2; Thompson 7/2/10 at 2; ANR-CT-2; Akielaszek 7/2/10 at 2; ANR-JA-2. Entergy VY currently operates under a National Pollutant Discharge Elimination System (NPDES) permit issued by the Vermont Department of Environmental Conservation. *See In re Entergy Nuclear Vermont Yankee Discharge Permit 3-1199*, 989 A.2d 563, 582 (Vt. 2009) (upholding the applicability of Vermont Water Quality Standards to Entergy VY's NPDES permit for discharges into the Connecticut River).

In *Vermont v. New Hampshire*, the U.S. Supreme Court determined the boundary between Vermont and New Hampshire to be the low-water mark on the western side of the Connecticut River as demarcated by a monument set in 1897 at the southeastern corner of Vermont "below the shore line at a point near the water's edge when the river was 'very low.'" *Vt. v. N.H.*, 289 U.S. 593, 618 (1933). Under the U.S. Supreme Court's decree in 1934, the boundary between Vermont and New Hampshire became fixed beginning "at the apex of the granite monument which marks the southeast corner of Vermont… and extending thence northerly along the western side of the river at the low-water mark, *as the same is or would be if unaffected by improvements on the river*…." *Vt. v. N.H.*, 290 U.S. 579, 579-80 (1934) (emphasis

added).

Since the monument marking Vermont's boundary in the southeast corner of the state was set in 1897 two significant intervening events have occurred affecting Vermont's jurisdictional reach over Connecticut River waters. First, due to the construction of the Vernon Dam in 1909, the water level of the Connecticut River has been artificially raised at the Station so much so that the impounded water body behind the dam is referred to as the "Vernon Pond." Exhibit EN-JH-6 at 7. The expansion of the Connecticut River to an average width of 1600 feet at the Vernon Pond means that the fixed low-water state boundary by the Station is currently submerged and that Vermont has clear public trust responsibilities over the waters into which Entergy VY discharges. Exhibit EN-JH-6 at 7-8. Second, a substantial fill occurred during Vermont Yankee's construction on the site on which the Station's CAB Building and COB Building sit, which has artificially elevated the ground level above the Vernon Pond's high-water mark. Shaw 3/31/10 at 3; Exhibit EN-MS-2. The Supreme Court of Vermont has held that the public trust doctrine attaches to dredge used to fill shallow areas of property adjacent to the shores of a waterway for the purpose of construction. *Cmty. Nat'l Bank v. State*, 172 Vt. 616, 617 (2001). The *Community National Bank* court explained that even if the legislature had the power to abrogate public trust obligations to an area protected by the public trust, an "intent to abandon must be clearly expressed or necessarily implied; and if any interpretation of the statute is reasonably possible which would retain the public's interest in tidelands, the court must give the statute such an interpretation." *Id*. at 618 (quoting *State v. Cent. Vt. Ry., Inc.*, 153 Vt. 337, 347 (1989)(internal quotation marks omitted). The effect of both the construction of the Vernon Dam and the fill during the Station's construction is that Vermont has public trust oversight over the portion of the Connecticut River into which Energy VY discharges and the filled land east of the

Station's AOG Building. The state has an "ineluctable duty to exercise" its public trust responsibilities over these stretches to protect public uses including safe bathing, swimming, and fishing. *State v. Cent. Vt. Ry., Inc.*, 153 Vt. 337, 346 (1989) (citing *Nat'l Audubon Soc'y v. Super. Ct.*, 658 P.2d 709, 712 (Cal. 1983)). The radioactive leaks at Vermont Yankee have contaminated and compromised the public trust uses of the land and surface water. Greenwood 7/1/10 at 7-8; Lochbaum 6/30/10 at 21-23; French 6/30/10 at 19).

The state also has a public trust obligation to "protect its groundwater resources to maintain high-quality drinking water." 10 V.S.A § 1390(3). Vermont Yankee's radioactive groundwater contamination has violated the state's public trust responsibility to ensure high-quality drinking water resources. *Id.* Until the contamination of groundwater at the Station is remediated, monitoring wells consistently reveal no contamination, and Entergy VY takes reasonable action to limit future groundwater contamination the Board in its public trustee capacity has a duty to revoke Entergy's CPG. As the U.S. Supreme Court stated in *Illinois Central Railway Co. v. Illinois*, "The state can no more abdicate its trust over property in which the whole people are interested, like navigable waters and soils under them, so as to leave them entirely under the use and control of private parties, … than it can abdicate its police powers in the administration of government and the preservation of the peace." *Ill. Cent. R.R. Co. v. Ill.*, 146 U.S. 387, 453 (1892). Here, Entergy VY has polluted not only its land, but land and water that is held in public trust. They have in essence taken public resources for private gain and have damaged that resource in violation of the public trust. Since the state's public trust authority is "absolute," this Board's obligation to ensure that the safe public uses of state groundwater and surface water are protected is not preempted by the AEA. *State v. Cent. Vt. Ry., Inc.*, 153 Vt. 337, 342 (1990) (citing *Martin v. Waddell's Lessee*, 41 U.S. 367, 411 (1842).

5. The Leaks at Vermont Yankee Have Significant Implications Apart from Radioactive Health and Safety.

In the order opening this proceeding, the Board observed that the leaks at the Station triggered economic and land-use related concerns:

> [i]t appears indisputable that the leaks may result in increased site contamination that could substantially increase decommissioning costs. Increased site contamination could also delay completion of the decommissioning process, which in turn could affect the future economic use of the site. These concerns do not fall within the preempted sphere of radiological health.

Investigation into Entergy Nuclear Vermont Yankee, Docket 7600, Order of 2/25/10 at 8. Not only do the recurring leaks affect land use of the Station, but also current and future land use of adjacent property owners and downstream Connecticut River users. Entergy concedes that the leakage from the Station has spread off-site into the Connecticut River. A.CLF:EN.1-7; Shaw 3/31/10 at 9; Exhibit EN-MS-4; Spiese 7/2/10 at 4. The impacts of the recurring leaks on the state's natural resources, and on the region's property values, land use, and future land use extend far beyond radiological health and safety concerns associated with on-site plant operations. (Lochbaum 6/30/10 at 27-29). The contamination literally and figuratively has seeped outside the regulated field.

6. The Board Has Consistently Recognized Its Authority to Regulate Aspects of Nuclear Power Generation Apart from Radiological Health and Safety.

Time and time again, the Board has concluded that it has regulatory authority related to the operation of Vermont Yankee in areas traditionally within state purview. In the Board's proceeding regarding the proposed sale of the facility to Entergy VY in 2002, the Citizens

Awareness Network (CAN) challenged two Memoranda of Understanding (MOUs) between various parties regarding decommissioning funds and reporting of leaks. *Investigation into General Order No. 45*, Docket 6545, Order of 6/13/10 at 128. The Board held that neither of the MOUs was preempted. *Id*. at 118, 128. The Board reasoned that "[a] decision by this Board based upon this state's traditional police power, limited to issues associated with the manner in which Vermont meets it energy needs, does not conflict with the Atomic Energy Act or the NRC's regulations." *Id*. at 118, 128. In the same proceeding, Entergy argued that the Board was preempted by the Federal Energy Regulatory Commission (FERC) from approving a CPG contingent upon returning excess decommissioning funds to Vermont ratepayers. *Investigation into General Order No. 45*, Docket 6545, Order of 7/11/02 at 11. The Board rejected Entergy's preemption argument stating,

> Again, we emphasize that our conclusion to impose this condition on the sale of Vermont Yankee, and to decline to amend the condition, as Entergy has requested, is not really dependent on our reading of Federal regulations. Our conclusion has an adequate and independent basis in our determination as to what is necessary and consistent with the general good of the state …. [F]or Entergy to operate lawfully it must comply with all the terms of its CPG….

Investigation into General Order No. 45, Docket 6545, Order of 7/11/02 at 15. The Board unequivocally asserted its authority to regulate Entergy VY's decommissioning fund independently of FERC and NRC rules and made explicit that the terms of Entergy's CPG have the force of law.

In 2006, Entergy again challenged the authority of the Board regarding management of spent fuel. *Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 61. Entergy VY advanced arguments virtually identical to those it advances in this proceeding claiming that the AEA preempted all state regulation

involving nuclear materials and nuclear plant construction and operation, including the Board's regulation of Entergy VY's financial ability to manage spent nuclear fuel. The Board roundly rejected Entergy's preemption argument:

> We are not convinced by Entergy's argument here that we are preempted from considering financial assurances as required by 30 V.S.A. § 6522(b)(1)…. This is not a matter for which the Atomic Energy Act has left no room for the states. Instead, this requirement falls squarely within the traditional economic and land use regulation reserved to the states. Like the economic considerations that led California to impose the moratorium on nuclear plants considered in *PG&E*, this requirement is designed to ensure that economic costs were not passed on to the state of Vermont. We also find it hard to understand the validity of a preemption argument where, as here, there has been such a failure by DOE to fulfill its statutory responsibilities to take ownership of and remove the spent nuclear fuel in a timely manner, with the result that the state of Vermont may need to absorb some risk. Moreover, … we are not seeking assurances that may conflict with federal requirements…. The Atomic Energy Act has been interpreted so as to preempt states from becoming involved in the field of nuclear safety, certainly. However, it cannot automatically be interpreted to preempt states from regulating land use or from measures states may undertake to ensure what a state considers acceptable land use…. The financial assurances do not relate solely to safety, but also to whether the project might have land use or financial implications for the state.

Petition of Entergy Nuclear Vermont Yankee, Docket 7082, Order of 4/26/06 at 64-65. Like the financial assurances related to spent nuclear fuel storage, the ramifications of Vermont Yankee's recurring leaks, and Entergy VY's inadequate response to those leaks on the facility's decommissioning fund and on future land uses at the site "do not relate solely to safety, but also … have land use or financial implications for the state." *Id.* As such, the land use and economic concerns related to the facility's recurring leaks fall squarely within the realm of states' traditional regulatory authority. Board action based on these concerns, including shutting down the facility, clearly is authorized.

7. The Board Has Recognized Its Authority to Take Action Against Entergy VY.

The Board has confirmed its authority to shut down or restrain the operation of Vermont Yankee. In the Board's order authorizing the sale of Vermont Yankee Nuclear Power Station to Entergy VY and issuing Entergy VY the CPG under which it currently operates the plant, the Board stated:

> As part of this proceeding, the Board will issue a similar Certificate to ENVY [Entergy Nuclear Vermont Yankee] and ENO [Entergy Nuclear Operations] under Section 231. The Board has the authority under Section 231(a) of Title 30 to amend or revoke any Certificate for good cause. Thus, if the Board were to find upon a compelling record that any owner's ownership of Vermont Yankee no longer promoted the general good, the Board could revoke the Certificate, regardless of whether it was held by ENVY or VYNPC [Vermont Yankee Nuclear Power Corporation].

Investigation into General Order No. 45, Docket 6545, Order of 6/13/02 at 80. In a footnote, the Board acknowledged that it could take action to amend or revoke a CPG only on non-preempted concerns after a full administrative hearing. The Board then only identified "radiological safety" as a federally preempted field. *Id*. at 80 n.159.

Entergy itself has previously acknowledged the Board authority to revoke its CPG. In proceedings regarding the sale of Vermont Yankee, PSB Docket # 6545, Entergy's attorney stated:

> If Entergy violates any conditions of the CPG or the MOU, [the Board has] recourse against the company. You [the Board] have the right to haul us in and take away the CPG if it's significant enough.

Docket 6545 Tr. 7/2/02 at 60.

More importantly, the Board has already acknowledged its authority to take action against Entergy VY in this proceeding. *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, Order of 2/25/2010 at 7. In opening this proceeding, the Board declared that it is

"not preempted from taking action in response to the leaks at Vermont Yankee, to the extent that the leaks may have economic and other non-radiological-health-and-safety consequences and to the extent that our action neither conflicts directly with NRC's exercise of its federal jurisdiction nor frustrates the purpose of the federal regulation." *Id.*

8. Board Action in this Proceeding is Consistent with the U.S. Supreme Court's PG&E Decision.

Board action to shut down or restrain the operation of Vermont Yankee fully comports with the U.S. Supreme Court's decision in *PG&E*. The *PG&E* Court upheld a state law provision, which had regulatory effect on nuclear waste disposal, because the state's purpose for enacting the statute fell outside the federally-preempted field of radiological health and safety. *PG&E*, 461 U.S. at 190. The Court in *PG&E* found "economic uncertainties engendered by the nuclear waste disposal problems" in the state, 461 U.S. at 215, and "accept[ed] California's avowed economic purpose as the rationale for enacting" the state's provision. *Id*. at 217. "Accordingly," the Court held, "the statute lies outside the occupied field of nuclear safety regulation." *Id*. The Court reasoned that Congress "left sufficient authority in the states to allow the development of nuclear power to be slowed or even stopped for economic reasons." *Id*. at 223.

Justice Blackmun characterized *PG&E*'s "fundamental teaching" as holding "that state regulation of nuclear power *is* pre-empted to the extent that its purpose is to regulate safety." *Silkwood*, 464 U.S. at 260 (Blackmun, J., dissenting) (urging broader federal preemption in the nuclear context). The corollary of this, of course, is that state regulation of nuclear power is *not* preempted to the extent that its purpose is to regulate within the states' traditional authority of non-radiological health and safety concerns.

Board action addressing violations of law to ensure that the environment is protected and that facilities are operated responsibly and reliably and avoid negative economic consequences is wholly consistent with federal authority and is not preempted. The economic and land-use effects associated with Vermont Yankee's recurring leaks and failure to meet legal requirements plainly indicate that the facility's continued operation no longer promotes the general good of the state. Unless and until Entergy VY takes reasonable measures to responsibly evaluate and clean up any contamination, avoid ongoing leaks and operational failures, and addresses the full range of negative economic and land-use consequences resulting from past leaks and malfunctions, the Board has clear authority to revoke Entergy VY's CPG.

Entergy VY selectively rewrites the fundamental holding in PG&E that a state has authority to regulate aspects of nuclear power generation when it has a non-safety purpose to do so. Entergy VY argues that PG&E creates a dichotomy between state regulation in the pre-construction context when "the motivation of the State is highly relevant to the pre-emption analysis" Brief for Entergy at 16, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010, and "an effort by the state to regulate the construction or operation of a plant once approved" when the state's motivation is irrelevant and always preempted. *Id*. at 3. The Court nowhere draws this line. Contrary to Entergy VY's claim, the majority in fact makes it clear that states retain their traditional regulatory authority regardless of its regulatory timing: "[T]he legal reality remains that Congress has left sufficient authority in the states to allow the development of nuclear power to be slowed or even stopped for economic reasons." *PG&E*, 461 U.S. at 223. A state's regulatory motivation is central to the court's preemption analysis, not the timing of state regulation. Neither the *PG&E* majority nor subsequent precedent has identified timing as a relevant parameter of state authority. The immateriality of a state's regulatory timing

is confirmed by the majority's citation of Justice Brandeis' pronouncement that a "franchise to operate a public utility … is a special privilege which … may be granted or withheld at the pleasure of the State." *Frost v. Corp. Comm'n*, 278 U.S. 515, 534 (1929) (Brandeis, J. dissenting). Further, the fact that the U.S. Supreme Court has accorded states the jurisdiction to exercise authority over the ratemaking of a nuclear generating facilities – a function that inherently requires regulation over time after a facility's initial approval – demonstrates that Entergy's pre-construction/post-approval dichotomy is erroneous. As the Court in *PG&E* recognized: "Any doubt that ratemaking and plant-need questions were to remain in state hands was removed by § 271, 42 U.S.C. §2018 …." 461 U.S. at 208. The very issuance of a CPG by the Board for a specific period of time, and approval of the sale with conditions, shows the continued Board oversight beyond construction.

Entergy's erroneous construction would make all post-approval state regulation directly affecting construction or operation of a nuclear plant automatically preempted. The implications of this claim would leave a state powerless to enforce the terms of its CPG in any circumstances. In fact, Entergy VY's construction leaves a state powerless to re-license or approve a sale of a nuclear facility since that decision would be a post-construction determination directly affecting a nuclear facility's operation. Entergy's contention that a state's ability to regulate a nuclear facility is static in time and triggered only prior to the instant of state certificate approval obliterates state licensing authority – authority that the Board has repeatedly recognized includes the ability to impose legally binding conditions upon a CPG or to amend or revoke a CPG. *Investigation into General Order No. 45*, Docket 6545, Order of 6/13/02 at 80.

Entergy VY in fact argues even more sweepingly that "states cannot leverage regulations in the areas left open to them under federal law to obtain any influence over plant construction or

operations" whatsoever. Brief for Entergy at 18, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010. Entergy VY's position directly conflicts with the *PG&E* decision upholding a state regulation prohibiting the *construction* of nuclear power plants prior to a state determination of adequate means for the disposal of nuclear waste. *PG&E*, 461 U.S. at 222-23. Entergy VY's position leaves a state with virtually no regulatory authority, since even an initial licensing, land use or employee-conditions decision would directly and substantially affect a nuclear plant's construction or operation. Even Entergy VY itself has agreed "that the Board has jurisdiction under current law to grant or deny approval of operation of the VYNPS [Vermont Yankee Nuclear Power Station] beyond March 12, 2012." Memorandum of Understanding, *Investigation into General Order No. 45*, Docket 6545, signed by the Vermont Department of Public Service 3/4/02 at 6; *see also Investigation into General Order No. 45*, Docket 6545, Order of 7/11/02 at 12 (citing tr. 7/2/02 at 19 (Scherman) ("Well there is no question that you [the Board] have the authority, if it's based upon a valid record and based upon the evidence in the record, to reject a proposed application.").

Entergy VY also erroneously relies on a handful of cases, often inapposite, from other circuits to support its claims, but overlooks *PG&E*'s fundamental holding and the prior precedent of this Board. *See* Brief for Entergy at 20, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010. Entergy VY ignores the controlling holding of *PG&E* affirming state authority, and relies only on one sentence dictum from the case to support an absurd proposition that would overrule the Court's very holding and preclude state regulation. *See* Brief for Entergy at 3, 16-17, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010 (citing *PG&E*, 461 U.S. at 212).

Other cases relied on by Entergy VY are misconstrued entirely. Entergy VY errs in citing the Tenth Circuit's decision in *Skull Valley Band of Goshute Indians v. Neilson* as holding that the state laws at issue, including provisions related to unfunded liability prevention, were preempted based on their "direct and substantial effect on radiological health and safety…." Brief for Entergy at 18, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010 ("While the laws at issue involved state attempts to regulate areas of traditional state concern (municipal services) and were motivated by economic concerns (unfunded liability prevention), the Tenth Circuit nonetheless found that the laws in question had a direct and substantial effect on radiological health and safety and were thus preempted."). In fact, the Tenth Circuit in *Skull Valley Band of Goshute Indians* found no such thing with respect Utah's unfunded liability prevention provisions. 376 F.3d 1223, 1250 (10th Cir. 2004). The Tenth Circuit assessed the challenged state laws separately. *See id*. at 1245-1254. The court held that Utah's unfunded liability provisions "conflict[ed] with the objectives of federal law" and gap-filling by the NRC in the Price-Anderson Act's indemnification and insurance scheme, *not* that the unfunded liability provisions had any direct and substantial effect on radiological health and safety. *Id*. at 1250. With respect to the municipal services provisions, the Tenth Circuit was careful to emphasize that the provisions were preempted under *PG&E* because they "address matters of radiological safety" and that Utah "failed to offer evidence that the provision allowing a county to ban [spent nuclear fuel] transportation and storage is supported by a non-safety rationale." *Id*. at 1246. Entergy VY grossly mischaracterizes the *Skull Valley Band of Goshute Indians* court's decision as holding all the challenged laws preempted under the "direct and substantial effects" test. Brief for Entergy at 18, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010.

Nor is Entergy VY's citation of *Maine Yankee Atomic Power Co. v. Bonsey*, 107 F. Supp. 2d 47 (D. Me. 2000), a district court decision from outside the Second Circuit's jurisdiction, availing. Brief for Entergy at 19, *Investigation into Entergy Nuclear Vermont Yankee*, Docket 7600, May 18, 2010. As the Board previously quoted when it declined to follow *Maine Yankee Atomic Power Co.* in its April 4, 2006 order, the "mere exercise of [some form of] jurisdiction by the [defendants] does not create an irreconcilable conflict with the objectives of federal law." *Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 65 (citing *Maine Yankee Atomic Power Co.*, 107 F. Supp. 2d at 56 (D. Me. 2000)(internal quotation marks omitted).

9. The NRC Has Never Denied the Regulatory Authority of States over Groundwater.

The NRC has never repudiated the notion that States may have a role to play in regulating radioactive releases affecting groundwater even in actions that "could affect plant operations." Letter from Stephen G. Burns, General Counsel, NRC, to Jim Riccio, Nuclear Policy Analyst, Greenpeace (July 9, 2010)(attached). In a letter to the NRC dated May 25, 2010, various environmental groups requested that the agency "confirm in writing that the NRC recognizes that it is both legal and appropriate for the States to take action against licensees when drinking water is under threat." *Id*. (citing Letter from Paul Gunter et. al., Beyond Nuclear, to Gregory B, Jaczko, Chairman, NRC (May 25, 2010). The agency responded, "The NRC has certainly never denied that States have some authority over groundwater." Letter from Stephen G. Burns, General Counsel, NRC, to Jim Riccio, Nuclear Policy Analyst, Greenpeace (July 9, 2010). The agency noted that it sought to defer regulation of groundwater to the States at *in situ* leach uranium mines. *Id*. It further observed that under the Clean Air Act states retained the authority

to regulate radioactive releases from nuclear generating facilities including the authority to set more stringent radionuclide air emissions standards than the NRC. *Id*. The NRC itself recognizes that states are not wholly preempted from all facets of radiological regulation. *Id*.

10. *Board Action Neither Conflicts with nor Frustrates the Purpose of Federal Regulation*

Both field and conflict preemption are types of implied preemption that operate when the court infers a statutory congressional intent to preempt state regulation. *Hillsborough County, Fla. v. Automated Med. Lab., Inc.*, 471 U.S. 707, 713 (1985). A federal statute precludes state action by field preemption when a federal statutory scheme is so pervasive that it leaves no room for the states to regulate further in a given field or an identifiable portion of it. *PG&E*, 461 U.S. at 213; *Rice*, 331 U.S. at 230 (citing *Penn. R. Co. v. Pub. Serv. Comm'n*, 250 U.S. 566, 569 (1919). Since the federal government occupies only the radiological health and safety portion of the regulatory field of nuclear power generation, states are not preempted from asserting jurisdiction over nuclear facilities if they act in their traditional regulatory capacity. *PG&E*, 461 U.S. at 212. Still, federal law may preclude state action by conflict preemption either when it is impossible to comply with both federal and state laws or when state law frustrates the purpose of Congress' objectives. *Hillsborough County*, 471 U.S. at 713.

Conflict preemption does not preclude this Board from shutting down or restraining Vermont Yankee because Board action here neither conflicts with nor frustrates the purpose of federal regulation. Revoking Entergy VY's CPG to operate Vermont Yankee based on the non-radiological health and safety concerns associated with the facility's recurring leaks and Entergy VY's inadequate response to those leaks is not in any way inconsistent with the AEA or NRC standards. *See* 42 U.S.C. § 2021; see also 10 C.F.R. §§ 20, 50. Board action in this case imposes

no new regulatory limitations that Vermont Yankee is not already obligated to follow. Moreover, the U.S. Supreme Court has dismissed the notion that Congress' desire to promote nuclear energy exists at the expense of licensing, safety, and traditional state regulatory action. *PG&E*, 461 U.S. at 222. The Court in *PG&E* noted that since Congress had contemplated the need for extensive regulation in the field of nuclear power generation, the AEA's purpose to promote nuclear development was not unyielding. *PG&E*, 461 U.S. at 222. Consequently, the court stated that it was up to Congress, not the courts, "to rethink the division of regulatory authority in light of … possible exercise by the states to undercut a federal objective." *PG&E*, 461 U.S. at 223; *see also Silkwood*, 464 U.S. at 257 (citing 42 U.S.C. § 2013(d)) (noting Congress's intent "that atomic energy should be developed and utilized only to the extent it is consistent 'with the health and safety of the public'). In enacting the AEA, Congress showed no intent to supplant state regulatory action motivated by concerns outside the realm of radiological health and safety. *See* 42 U.S.C. §2013(d); *see also* S. Rep. No. 86-870, at 11 (1959). As such, the Board is not preempted from taking regulatory action within the clear parameters Congress envisioned. Board action neither conflicts with NRC's exercise of its federal jurisdiction, nor does it conflict with the purpose of federal regulation. Rather, it is wholly consistent with federal regulation and the joint state and federal obligations and authority to oversee and regulate nuclear power facilities.

11. Board Action Is Particularly Warranted and Authorized Where the Federal Government Has Inadequately Fulfilled Its Statutory Obligations.

The grounds for Board jurisdiction are particularly compelling in this case since the Nuclear Regulatory Commission (NRC) has failed to take appropriate action to address the leaks and has allowed continued operation despite uncontrolled and unmonitored releases into the

environment. (Lochbaum 6/30/10 at 17; Shadis 7/2/10 at 9). The Board has previously recognized that the preemption defense loses force when a federal regulatory agency fails to perform its statutory obligations. The Board has declared:

> We also find it hard to understand the validity of a preemption argument where, as here, there has been such a failure by DOE to fulfill its statutory responsibilities to take ownership of and remove the spent nuclear fuel in a timely manner, with the result that the state of Vermont may need to absorb some risk.

Petition of Entergy Nuclear Vermont Yankee, Docket 7082, Order of 4/26/06 at 64-65. Underlying the preemption analysis is the basic assumption that federal regulators will perform their statutory obligations so as to pervasively occupy the regulatory field leaving no room for a state. *See Rice*, 331 U.S. at 231. If federal regulators abdicate their statutory duties, the regulatory field is no longer pervasively occupied and strong policy reasons support allowing states to step in to protect their interests. *Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 64-65. Nowhere is this more apparent than in the arena of nuclear power generation where the stakes of regulatory inaction are so high. Where, as here, the federal entity charged with overseeing the radiological health and safety of nuclear facilities, the NRC, has failed in meeting its regulatory responsibilities, the states must be permitted to fill the regulatory void.

The NRC's inaction has left Vermont's economy, environment and land use damaged and vulnerable. Against this backdrop, the Board clearly is permitted to take regulatory action to shut down or restrain Vermont Yankee. As recently as 2007 in *Massachusetts v. EPA*, the U.S. Supreme Court recognized a state's "special solicitude" when it asserts itself "in protecting its quasi-sovereign interests." *Mass. v. EPA*, 549 U.S. 497, 520 (2007). In upholding the State's standing to pursue its claim, the Court observed that when a state operates as quasi-sovereign "the state has an interest independent of and behind the titles of its citizens, in all the earth and

air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air." *Ga. v. Tenn. Copper Co.*, 206 U.S. 230, 237-38 (1907) (finding it "a fair and reasonable demand on the part of a sovereign that the air over its territory should not be polluted on a great scale …, that the forests on its mountains … should not be further destroyed or threatened by the act of persons beyond its control, that the crops and orchards on its hills should not be endangered from the same source"); *see also Huron Portland Cement Co. v. City of Detroit, Mich.*, 362 U.S. 440, 443 (U.S. 1960)("Legislation designed to free from pollution the very air that people breathe clearly falls within the exercise of even the most traditional concept of what is compendiously known as the police power."). In exercising its police power, this Board should be allowed to take action to protect Vermont's quasi-sovereign interests where the federal government has failed to regulate in a way that serves the general good of the state.

II. ENTERGY HAS WAIVED ITS PREEMPTION DEFENSE.

Even if the Board reverses itself and finds that any action against Vermont Yankee would fall within the ambit of a federally-preempted field, Entergy VY has explicitly and impliedly waived its preemption defense. The Board has stated that Entergy VY, as a party to an MOU dated June 21, 2005, is obligated "not to seek federal preemption (except where Entergy VY would not comply with NRC obligations)." *Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 86. Entergy's counsel also directly conceded that the Board has the ability to shut down Vermont Yankee based non-compliance with its CPG. Docket 6545, Tr. 7/2/02 at 60.

Entergy VY has also consistently and voluntarily consented to regulatory action by the

state constituting an implied waiver of the right to assert preemption. *See, e.g.*, *Islander East Pipeline Co., LLC v. Conn. Dep't of Envtl. Prot.*, 482 F.3d 79, 90 (2d Cir. 2006) (finding that a state voluntarily waived its sovereign immunity by electing to participate in and not withdrawing from regulatory schemes); *see also Berghuis v. Thompkins*, 130 S. Ct. 2250, 2262 (2010) (finding that an uncoerced statement by the accused established an implied waiver of the right to remain silent where the accused understood his right). In an MOU dated from 2002, Energy VY

> expressly and irrevocably agree[d]…to waive any claim …that federal law preempts the jurisdiction of the Board to take the actions and impose the conditions agreed upon in this paragraph to renew, amend or extend the ENVY CPG and ENO CPG to allow operation of the VYNPS after March 21, 2012, or to decline to so renew, amend, or extend.

Memorandum of Understanding, *Investigation into General Order No. 45*, Docket 6545, signed by the Vermont Department of Public Service 3/4/02 at 6. In another MOU dated July 30, 2002, Entergy VY agreed to notify the Vermont Department of Public Service about radioactive leaks directly related to radiological health and safety concerns. Memorandum of Understanding on Cooperation, Notification and Access Between Entergy Nuclear Vermont Yankee and Vermont Department of Public Service, 7/30/02 at 2-3. This MOU requires Entergy to alert the Vermont Department of Public Service to all "[l]eaks across a system boundary where radioactive material is present" if "[t]he leak requires action for the protection of plant personnel" or if it "results in measurable quantities of radioactivity being released to the environs by a path not otherwise allowed or recognized by the plant's operating license." *Id*. Entergy also agreed to provide the Department of Public Service access to all documents handed over to NRC facility inspectors, and to provide the Department of Public Service ongoing unescorted access to the facility consistent with security and safety requirements. *Id*. at 4. Moreover, Entergy has agreed "not to store waste generated outside Vermont on site;" to "use its commercial best practices to remove

spent fuel as quickly as possible;" and to "configure the spent fuel pool to surround high-decay-heat assemblies with low-decay-heat assemblies." *Petition of Entergy Nuclear Vermont Yankee*, Docket 7082, Order of 4/26/06 at 85. All of these MOU provisions directly and substantially affect radiological aspects of nuclear power generation at the Station. By entering into these MOUs, Entergy has agreed to oversight by state regulators and to radiological restrictions beyond those of the NRC. Entergy VY has waived its preemption defense.

CONCLUSION

For the forgoing reasons, the Vermont Public Service Board is not preempted by federal law from granting the relief requested in this proceeding.

Dated in Montpelier Vermont this 27 day of August, 2010.

CONSERVATION LAW FOUNDATION

By: _____

Sandra Levine
Senior Attorney
Vermont Advocacy Center
15 East State Street, Suite 4
Montpelier, VT 05602
(802) 223-5992
(802) 223-0060 (fax)
slevine@clf.org